

WHAT IS CLAIMED IS:

1. A cigarette comprising a tobacco rod and a filter element connected to the tobacco rod, said filter element having an end proximal to the tobacco rod and an end distal from the tobacco rod, wherein said filter element comprises:

a first longitudinally extending section of filter material positioned at the end of the filter element proximal to the tobacco rod;

a second longitudinally extending section of filter material positioned at the end of the filter element distal from the tobacco rod and spaced apart from said first section of filter material, the two sections of filter material defining a compartment therebetween; and

an adsorbent material contained within at least a portion of said compartment,

wherein at least one channel extends through said first section of filter material, said channel being adapted for passage of mainstream smoke between said tobacco rod and said compartment.

2. The cigarette of Claim 1, wherein said at least one channel comprises a single channel proximal to the central axis of said first section of said filter material.

3. The cigarette of Claim 1, wherein said at least one channel comprises a plurality of channels.

4. The cigarette of Claim 3, wherein the plurality of channels are spaced along the periphery of first section of said filter material.

5. The cigarette of Claim 3, wherein the plurality of channels are proximal to the central axis of said first section of filter material.

6. The cigarette of Claim 1, wherein said at least one channel has a cross-sectional area of about 0.1 to about 50 mm².

7. The cigarette of Claim 6, wherein said at least one channel has a cross-sectional area of about 0.5 to about 15 mm².

5 8. The cigarette of Claim 1, wherein said first section of filter material and said second section of filter material are each independently selected from the group consisting of cellulose acetate tow, gathered cellulose acetate web, polypropylene tow, gathered polypropylene web, gathered polyester web, gathered paper, and strands of reconstituted tobacco.

10 9. The cigarette of Claim 1, wherein said first section of filter material and said second section of filter material comprise plasticized cellulose acetate tow.

10. The cigarette of Claim 1, wherein the overall length of the filter element is about 15 15 to about 65 mm.

11. The cigarette of Claim 10, wherein the overall length of the filter element is about 25 to about 50 mm.

20 12. The cigarette of Claim 1, wherein the length of each of the first and second sections of filter material is about 5 to about 25 mm.

13. The cigarette of Claim 12, wherein the length of each of the first and second sections of filter material is about 5 to about 15 mm.

25 14. The cigarette of Claim 1, wherein said compartment has a length of about 5 to about 20 mm.

15. The cigarette of Claim 14, wherein said compartment has a length of about 5 to 30 about 10 mm.

16. The cigarette of Claim 1, wherein said adsorbent is selected from the group consisting of activated carbon, molecular sieves, clays, activated aluminas, silica gels, and mixtures thereof.
- 5 17. The cigarette of Claim 1, wherein said adsorbent is activated carbon.
18. The cigarette of Claim 17, wherein the activated carbon has an activity of about 60 to about 150 Carbon Tetrachloride Activity.
- 10 19. The cigarette of Claim 1, wherein said adsorbent is in granular form.
20. The cigarette of Claim 19, wherein said adsorbent has a particle size of about 8x16 mesh to about 30x70 mesh.
- 15 21. A cigarette comprising a tobacco rod and a filter element connected to the tobacco rod, said filter element having an end proximal to the tobacco rod and an end distal from the tobacco rod, wherein said filter element comprises:
- a first longitudinally extending section of fibrous filter material positioned at the end of the filter element proximal to the tobacco rod;
- 20 a second longitudinally extending section of fibrous filter material positioned at the end of the filter element distal from the tobacco rod and spaced apart from said first section of filter material, the two sections of filter material defining a compartment therebetween; and
- an adsorbent material contained within said compartment,
- 25 wherein at least one channel extends through said first section of filter material, said at least one channel being adapted for passage of mainstream smoke between said tobacco rod and said compartment and having a cross-sectional area of about 0.1 to about 50 mm².